

# The Commonwealth's Accelerated Bridge Program

**March 13, 2009**

*French King Bridge, Ill.*





# ABP Overview

- Authorization:  
Chapter 233 of the Acts of 2008  
Signed *August 4, 2008*





# ABP GOALS

- Program Goals:
  - Improve the Condition of the Commonwealth's Bridges
  - Stimulate Economic Development and Job Creation
  - Save Money by Completing Projects Sooner
  - Complete Projects Efficiently and Innovatively
  - Provide Transparency and Accountability
  - Provide Access & Opportunity for MWDBE



# ABP Size and Scope

- MassHighway:
  - \$2.078 Billion
  - Rehabilitate or replace 191 site specific bridges
  - Preserve over 300 bridges
- DCR
  - \$906 Million
  - Rehabilitate or replace 29 site specific bridges
  - Preserve 50 bridges

**Total Program: \$2,984,000,000**



# ABP Governance

- **Oversight Council**- oversee and coordinate program, provide project controls, transparency and accountability
- **Members**
  - Chair appointed by Governor
  - Secretary of Administration & Finance or designee
  - Secretary of Transportation and Public Works
  - Secretary of Energy and Environmental Affairs
  - Commissioner of Department of Capital Asset Management
  - Commissioner of MassHighway
  - Commissioner of Department of Conservation and Recreation



# How Did We Get Here?

Massachusetts' bridge inventory tells the story:

- 4676 bridges: vehicular & pedestrian
  - 543 were structurally deficient when bill filed
  - Decades of reduced maintenance and preservation
  - Bridges typically designed to last 50 years
- 60% of bridges are over 45 years old





# Determining Bridge Conditions

**Structurally Deficient equates to  
“Poor” condition:**

- 1. Deck (wearing surface, joints): 13%**
- 2. Superstructure (beams, welds): 25%**
- 3. Substructure (abutments): 22%**
- Combination of 2 or more: 40%**



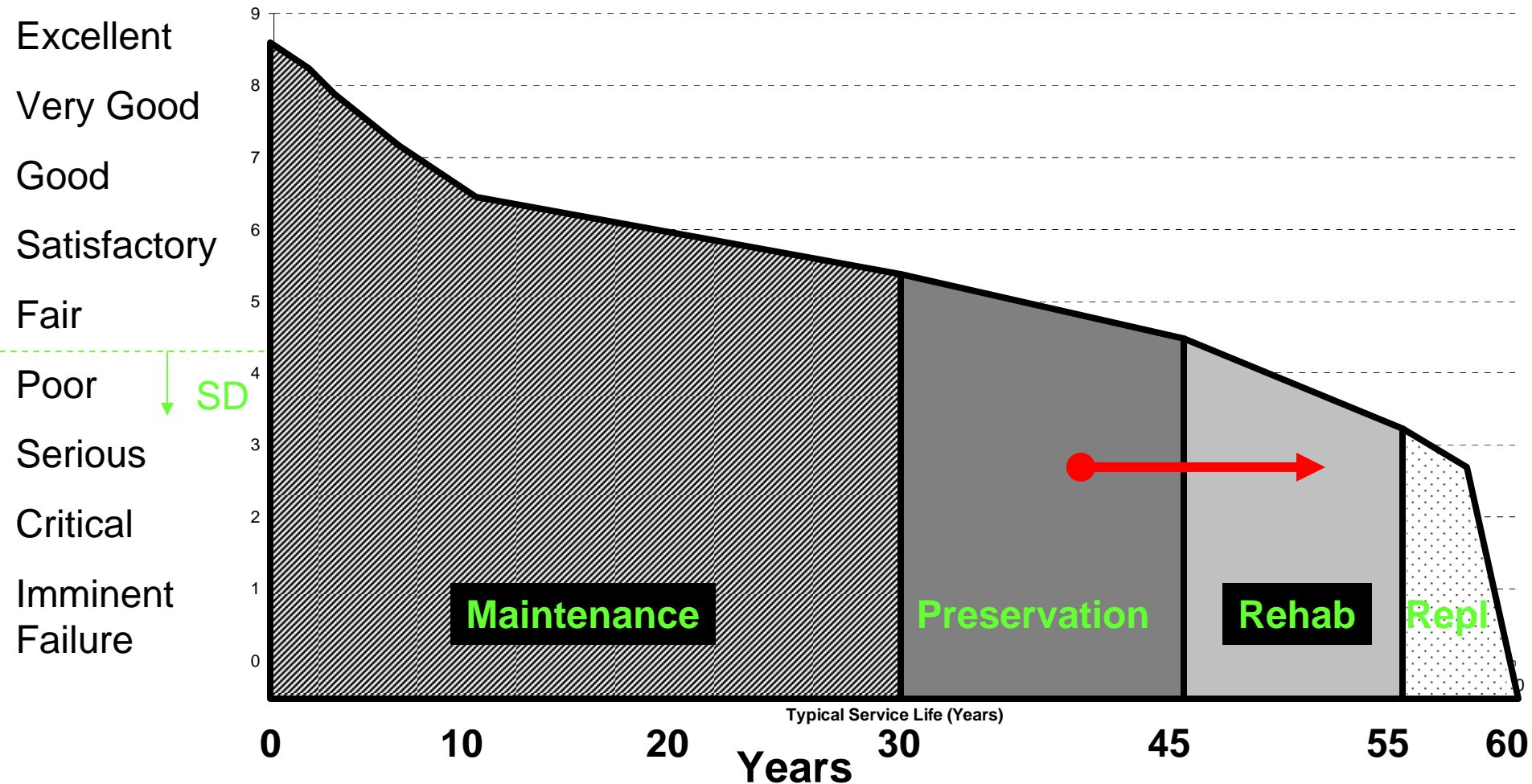
### Cost of Inaction

For every dollar not spent on preservation today will cost twice in rehabilitation in 8 yrs

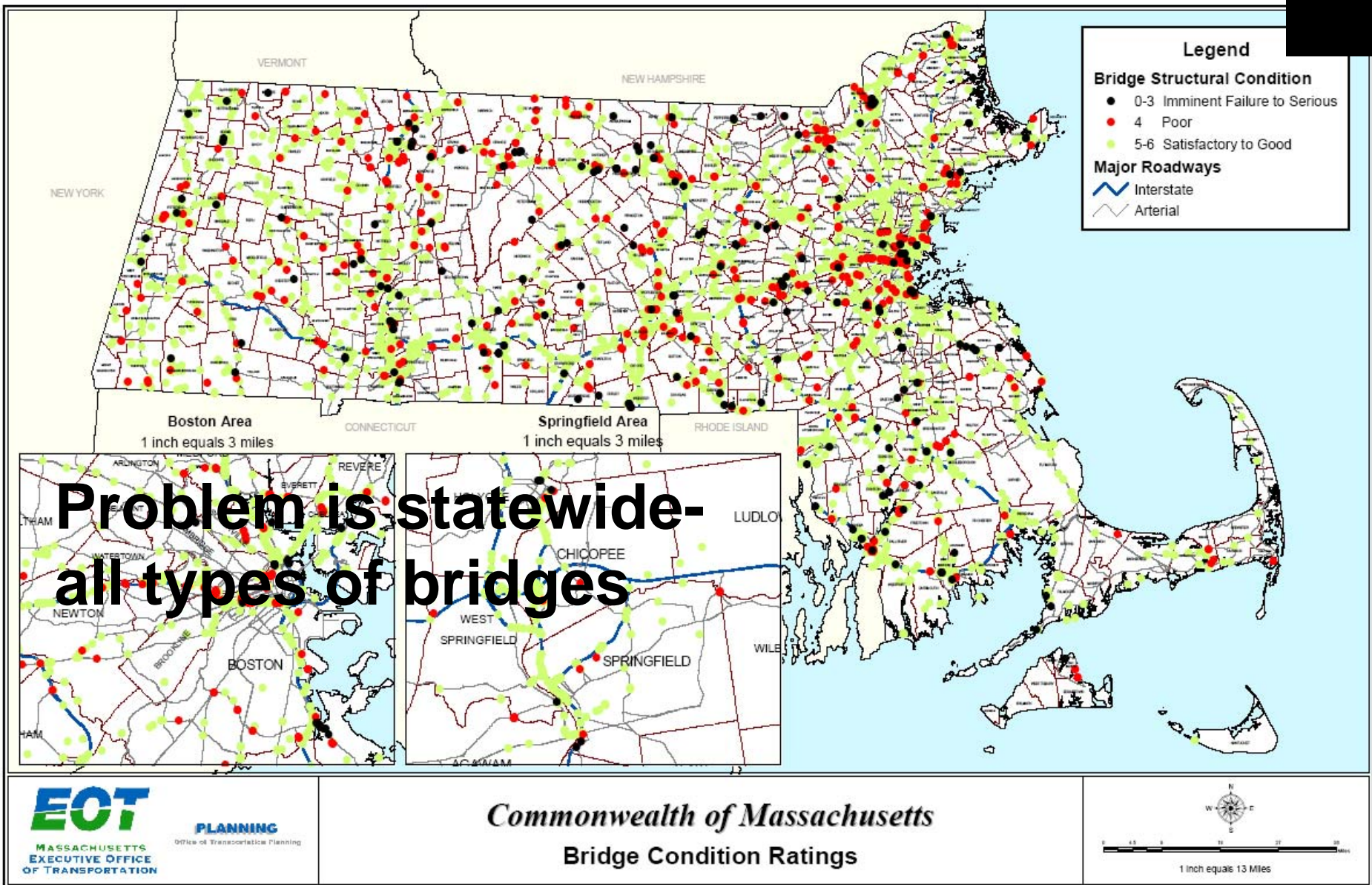


**\$ 1B Inflation**  
**\$.5B Deterioration**  
**\$1.5B Savings**

Bridge

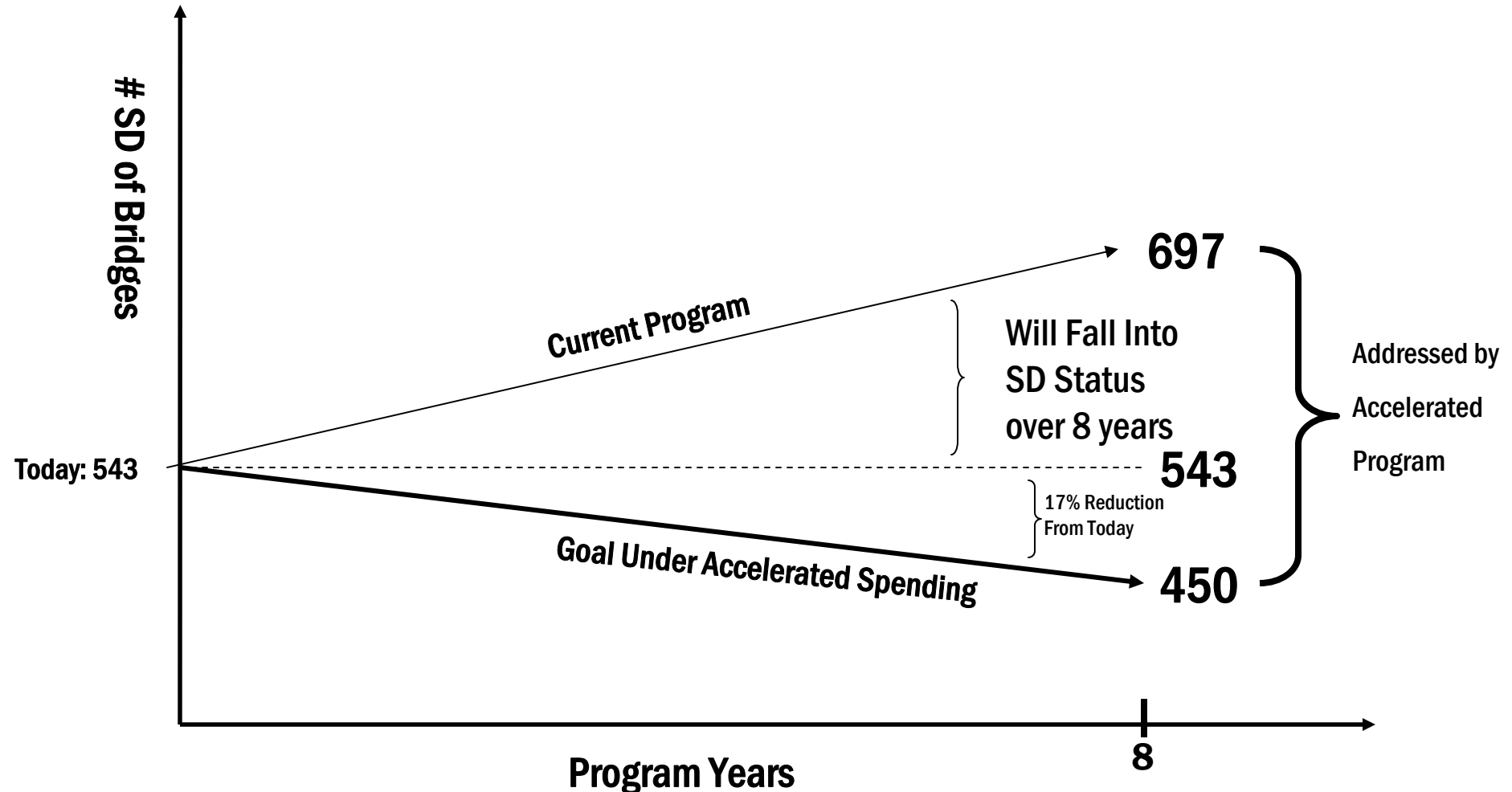








## Goal: Reduce by at least 250 the number of SD bridges





# Planning

Learn from other multi-billion dollar projects around the country:

- MWRA: Boston Harbor Project (Treatment Plant)
- Missouri: Safe and Sound Bridge Program
- Illinois: Toll way Congestion Relief Program
- Oregon: Transportation Investment Bridge Program
- Central Artery Project
- FHWA national workshop last month



# The Strategy

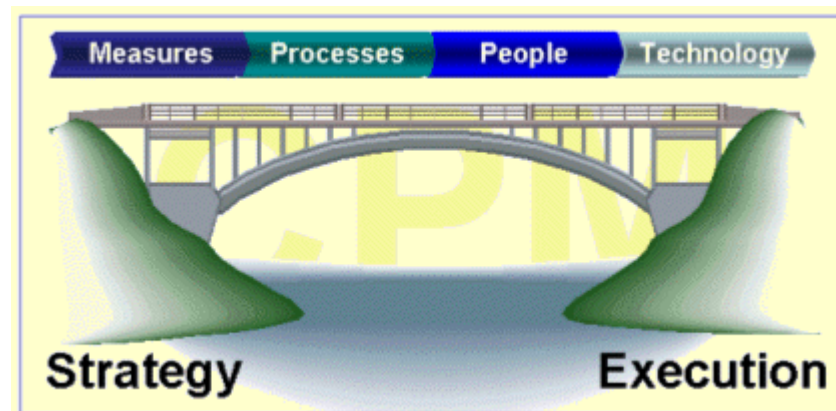
- **Prioritize work**: most cost effective, “procurement-friendly”  
“shovel ready”, statewide, mega-projects, preserve, repair, replace
- **Innovative contracting**: design-build, incentives, bundling
- **Accelerated construction**: standardize designs, prefab, single phase construction,
- **Mobility impacts**: corridor-wide analysis
- **Programmatic Agreements**: Permitting, state & federal agencies
- **Project Controls**: system-wide emphasis on measuring budget and schedule, risk management





# The Strategy

- **Maximize business participation**: outreach to small companies, minority, and women owned businesses
- **Embedded Management Organization**: all bridgework responsibility of Secretary of Transportation
- **Transparency of Program**: robust reporting and benchmarking of milestones





# On-going Considerations

- Vehicular traffic-Commuters
- Bicycles and Pedestrians
- Program sequencing
- Noise
- Cash flow
- Abutter impacts
- Community Involvement
- Strategic Partners: Labor, CIM, ACEC, FHWA





# Progress to Date

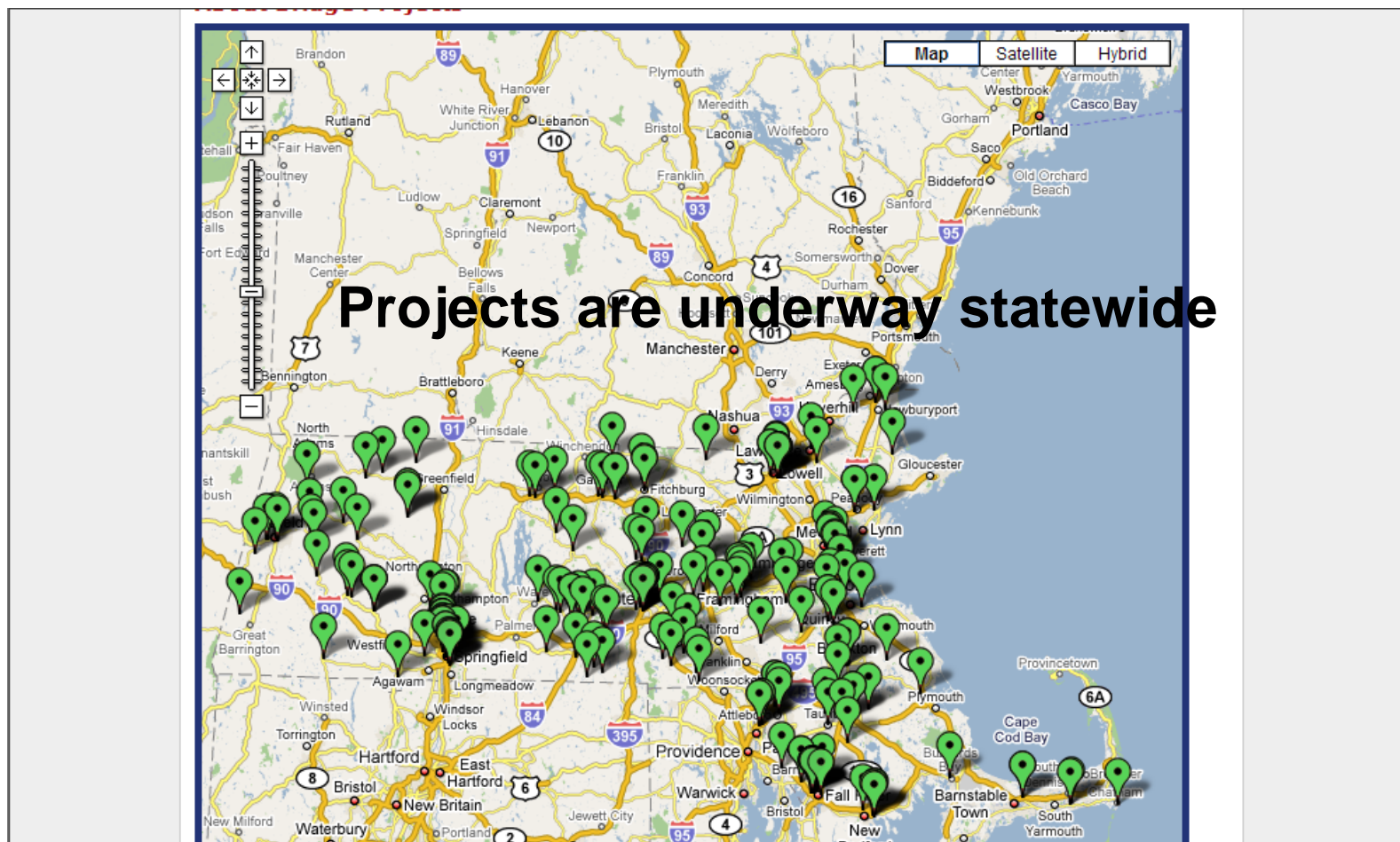
- 50 Projects Advertised totaling \$284 million
  - 44 MassHighway projects
    - \$207 Million
  - 6 DCR projects
    - \$77 Million





# Interactive Project Map

[www.mass.gov/acceleratedbridges](http://www.mass.gov/acceleratedbridges)







# Daily Project Updates Available on-line

The screenshot displays a web-based map application. A map of Massachusetts is shown with numerous green location pins. A pop-up window is open, providing details for a specific project. The map includes labels for various cities and towns, as well as major highways like I-95 and I-89. The pop-up window contains the following information:

**Project #:** 603602

**Bridge Name:** ASHLAND- BRIDGE REPLACEMENT, A-14-002, ROUTE 135 (UNION STREET) OVER THE SUDBURY RIVER

**Description:** The proposed project consists of replacing the existing Union Street (Route 135) bridge over the Sudbury River in its present location with minor improvements to the approach roadways. The bridge will remain open during construction utilizing staged construction.

**Image:** Three small photographs showing the bridge and surrounding area.

At the bottom of the map, there is a small text link: [Map data ©2008 Tele Atlas - Terms of Use](#).



## **Examples of Bridge Work Underway**

- Boston/Cambridge- Craigie Dam Bridge & Drawbridge
- Fall River- I-95 over Taunton River
- Middleborough-Raynham I-495
- Springfield- Longhill Street & Rte 5
- Attleboro- I-95 & I-295
- Westborough- Lyons Street over Rte 9
- Peabody- I-95 over Rte 128
- Statewide preservation contracts



# Other Progress



- MassHighway Team in place:
  - Shoukry Elnahal, ABP Director
  - Walter Heller, Director of Project Delivery
  - Tom Donald, Director of Project Design
  - 155 staff in place; 40 in process; Year 1 80%, Year 2 postings starting soon
- DCR Team building in close coordination with MassHighway



# Other Progress



- Program-wide agreements with permitting authorities.
- New Equitable Business Opportunity software allows on-line reporting of certified payrolls
- MWDBE participation ahead of the 14% goal. Currently at 17% of total contracts committed to date.
- Thousands of jobs created (14,000 direct, indirect and induced jobs per \$ billion- national measure)

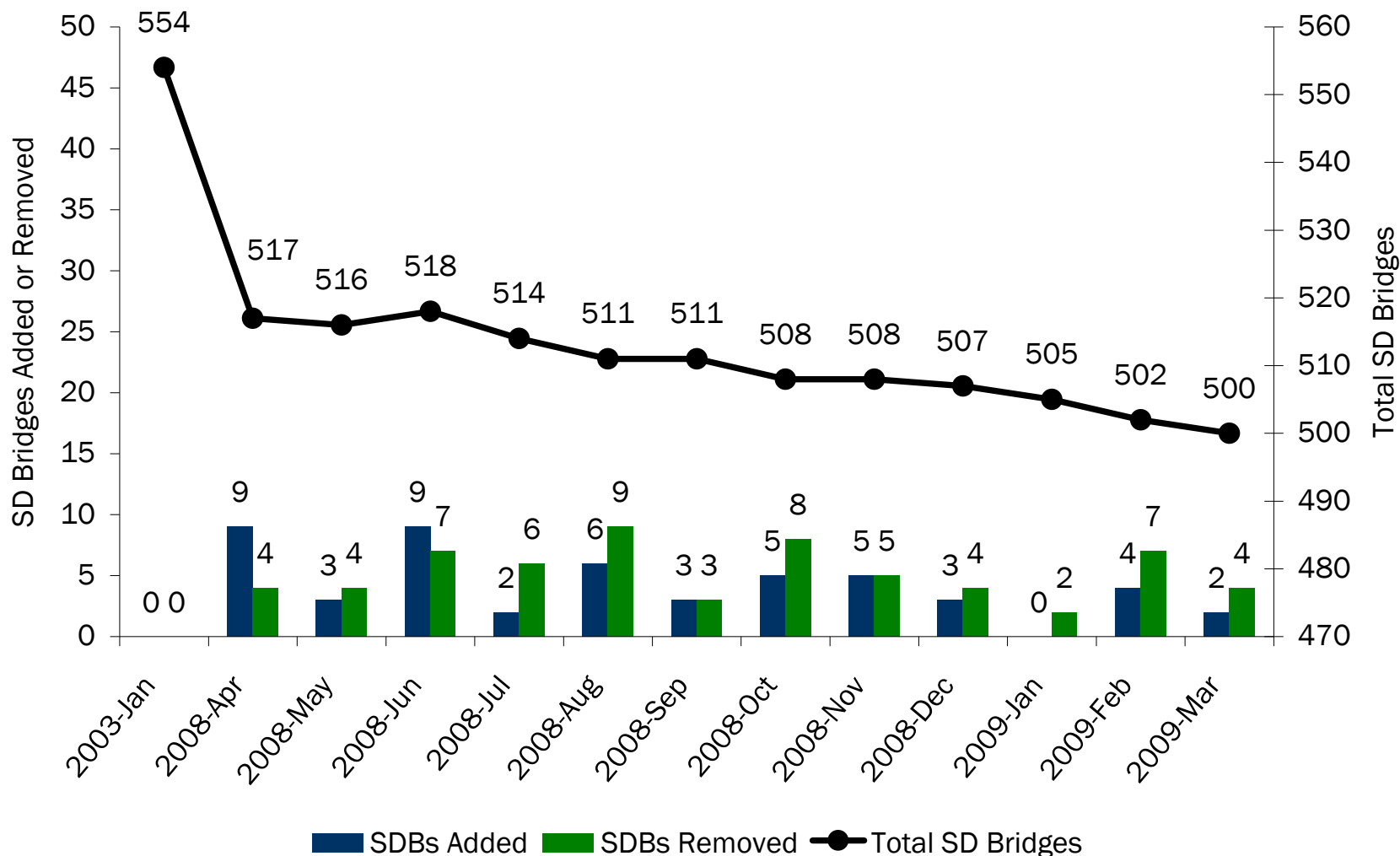






# Structurally Deficient Trend Reversing

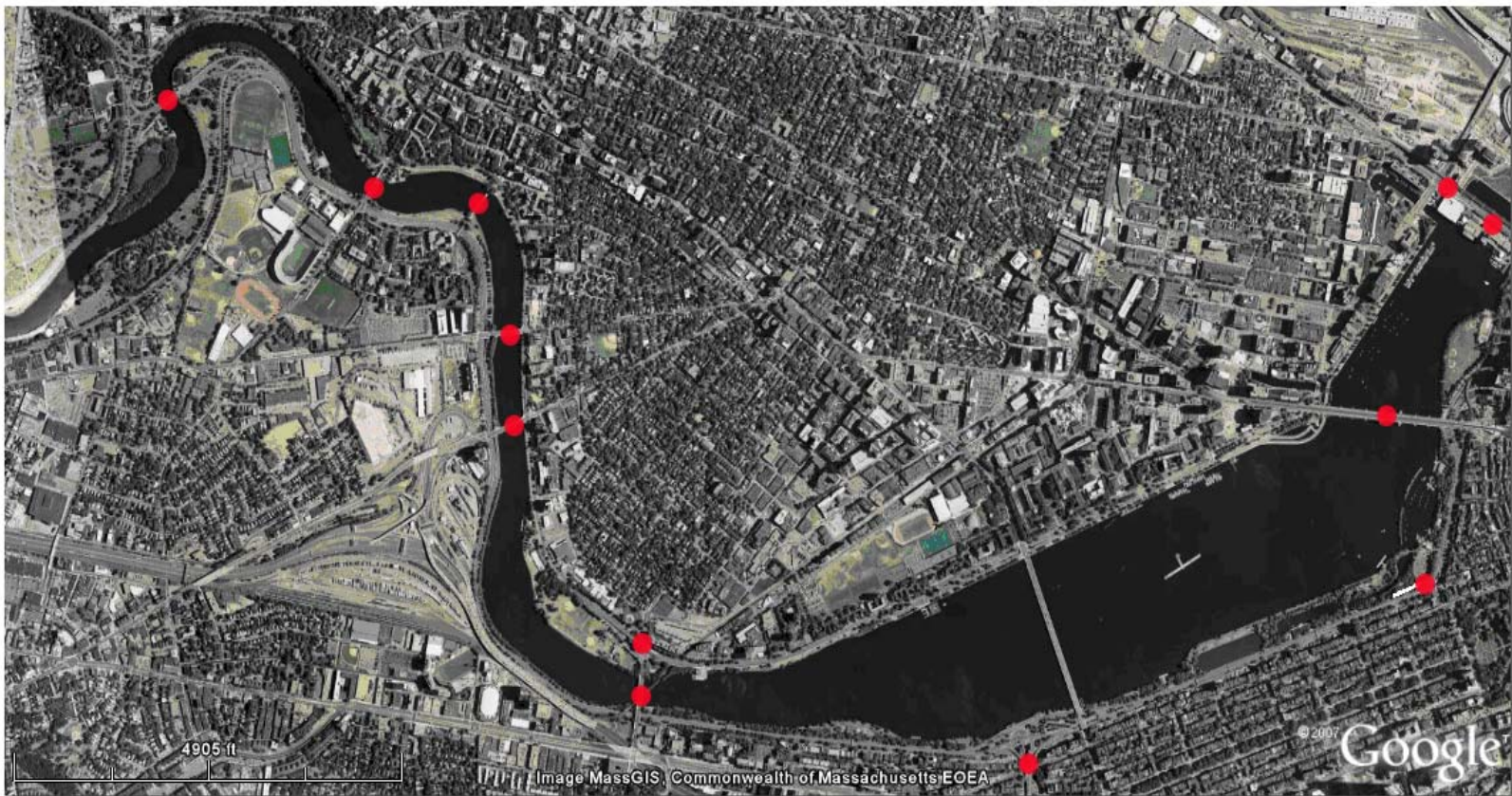
MassHighway - Structurally Deficient Bridges





# Issues to watch

## High Risk Projects: Mega-projects, Charles River Basin





# Thank You! Questions?

[www.mass.gov/acceleratedbridges](http://www.mass.gov/acceleratedbridges)

